A NEW SPECIES OF ACMAEODERA (COLEOPTERA: BUPRESTIDAE)¹

G. H. NELSON²

College of Osteopathic Medicine of the Pacific, Pomona, California 91766

The type series of *Acmaeodera discalis* Cazier (1940) included the holotype male from Arizona, Gila Co., Pinal Mts. [AMNH] and 2 female paratypes from Texas, El Paso. More material has been collected from Arizona, Texas, and Coahuila, and the female genitalia reveal 2 distinctively different forms. The population from Texas and Coahuila, including the 2 female paratypes of *A. discalis*, is described as a new species.

Abbreviations for collections [brackets] are as listed by Arnett and Samuelson (1969) except for the collections of W. F. Barr = WFBC and D. S. Verity = DSVC. Appreciation is extended to W. F. Barr, Univ. of Idaho, R. L. Westcott, Oregon Dept. of Agric., Salem, and to the publications committee of the Division of Plant Industry, Florida Dept. of Agric. and Consumer Services, for helpful comments on the manuscript; and to the following for the loan of specimens: W. F. Barr; F. M. Beer, Corvallis, Ore.; Lee H. Herman, AMNH; E. H. Smith, FMNH; J. W. Tilden, San Jose, Calif.; D. S. Verity and G. C. Walters, Los Angeles, Calif.; and R. L. Westcott.

Acmaeodera riograndei, new species (Figs. 2, 4)

Diagnosis.—Medium size, robust; pronotum and ventral body unicolorous aeneo-black; elytral disk yellow, cupreo-black or piceous along base, lateral and sutural margins and usually as small markings arranged longitudinally in middle of disk; prosternum with anterior margin slightly, arcuately retracted; apical abdominal sternite without subapical carina; terminal segment of female genitalia about as broad as long, less than 0.25 the length of elytra.

Description, female holotype, Fig. 2.—Head with front feebly convex; densely shallowly punctate and clothed with semierect white setae; clypeus shallowly emarginate; antennae extending to just beyond middle of pronotum, serrate from segment 5. Pronotum as wide as elytra, 1.9 times as wide as long; laterally bluntly angulate at basal third, converging obliquely to base and apex, constricted subapically; basal margin nearly straight, converging slightly forward; apical margin bisinuate with depressed border;

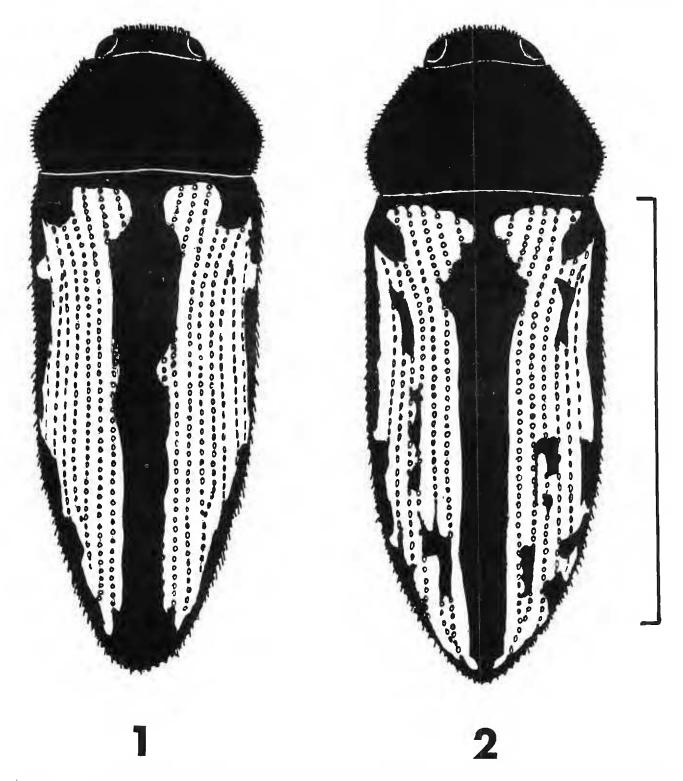


Fig. 1. Acmaeodera discalis Cazier, female plesiallotype. Fig. 2. Acmaeodera riograndei Nelson, new species, female holotype (line = 5 mm for Figs. 1 and 2).

surface convex, with feeble midline impression more evident basally and apically and with small deep fovea near base toward lateral angles; disk deeply, densely punctate, punctures denser toward margins; surface moderately clothed with short semierect white setae. Elytra with lateral margins diverging for short distance from base, then subparallel to middle and roundly converging to blunt apex; margins serrate in apical 0.66; strial punctures deep and moderately large; each interstrial space with single row of setal-

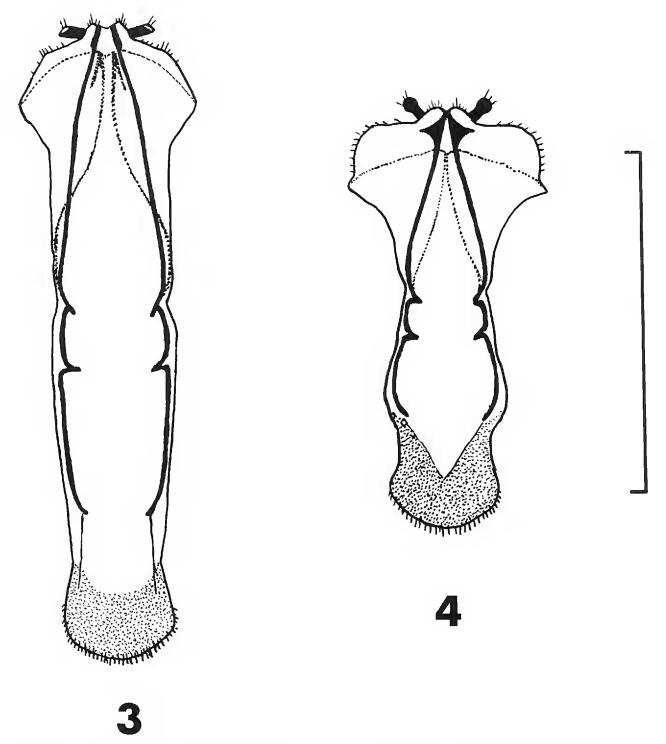


Fig. 3. A. discalis, female genitalia. Fig. 4. A. riograndei, female genitalia (line = 2 mm for Figs. 3 and 4).

bearing punctures. Beneath, densely punctate, with semirecumbent white setae.

Genitalia, Fig. 4, with membranous apical segment (coxite, according to Tanner, 1927) almost as wide as long, elytra more than 4 times as long as coxite.

Length 7.7 mm; width 2.8 mm.

Male, allotype.—Similar to female, but differs as follows: slightly less

robust; dark markings on disk of elytra less extensive, extending from base only 0.4 distance to apex; antennae slightly longer, with segments larger. Length 6.5 mm; width 2.4 mm.

Type material.—Holotype [USNM 75754], Texas, Brewster Co., Big Bend National Park, W side of Chisos Mts., Oak Springs, 24 June 1971, G. H. Nelson, on *Cirsium* sp. blossom; allotype [USNM] and 6 female paratypes, type locality, 25 June 1971, G. H. Nelson, on *Cirsium* sp. blossoms.

Other paratypes.—8 females, 6 males, same data as holotype; 1 female, 3 males, same data except 1 July 1963; 1 female, same data except 20 June 1965; 4 females, 1 male, type locality, 30 June 1963, and 1 male, 1 July 1963, F. M. Beer, Cirsium sp. blossoms; 1 female, Big Bend National Park, 5 km E of Panther Junction, 26 June 1963, G. H. Nelson and family, on yellow composite blossom; 1 female, Big Bend National Park, Castolon, 18 July 1967, J. W. Tilden; 1 female, 1 male, Big Bend National Park, Basin, 15 June 1948, M. Cazier; 2 males, same place, 14 June 1948, M. Cazier; 1 male, same park, 9.7-14.5 km E of Panther Junction, 1 July 1972, R. L. Westcott; 1 female, 22.6 km W of Panther Junction, 5 July 1961, P. D. Christenson; 2 females, Texas, El Paso (part of type series of A. discalis). Mexico, Coahuila: 1 female, 1 male, Guadalupe, 24 May 1952, M. Cazier, W. Gertsch, R. Schrammel; 1 female, Paila, 1156 m, 21 August 1947, Spieth; 5 females, 1 male, LaRosa, 1603 m, 22 August 1947, Spieth, Gertsch, Michener. Paratypes are in the following collections: AMNH, CASC, FMNH, FSCA, WFBC, RLWE, DSVC, FMBC, GCWC, GHNC, JWTC.

Variation.—There is considerable variability in the extent of the dark markings on the yellow elytral discal area in A. riograndei. The females are generally more heavily maculated with dark discal spots, 32 with and 2 with none. Of the males, 9 have discernible discal maculations and 9 do not. Females vary from 6.5 to 7.8 mm long and 2.3 to 3.0 mm wide; males from 6.0 to 6.8 mm long and 2.0 to 2.7 mm wide.

Biology.—Larval habits are unknown, and adult habits are included under type material.

Comparison.—This species belongs in the truncate group and will key to Acmaeodera quadrivittata Horn in Fall (1899). It can be separated from A. quadrivittata by its larger size, and the pronotum which has more angulate side margins and is more densely punctate. A. riograndei is superficially similar to Acmaeodera discalis Cazier but differs as follows: body usually more robust with elytra more blunt apically and yellow discal area with dark markings arranged longitudinally from humeral unbone toward apex (dark discal markings present in only 9 of 32 A. discalis examined); female genitalia with coxite about as broad as long in A. riograndei but more than 1.5 times as long as broad in A. discalis. On the basis of the female genitalia,

A. riograndei appears more closely related to A. quadrivittata than to A. discalis in spite of the close superficial resemblance to the latter.

Acmaeodera discalis Cazier (Figs. 1, 3)

The original diagnosis and description (Cazier, 1940) refer to the holotype male only, so the male will not be redescribed. Since the 2 original female paratypes belong to *A. riograndei*, female characteristics of *A. discalis* will be redefined.

Description, female plesiallotype.—Differs from male as follows: antennae shorter, reaching 0.66 the distance to hind angles of pronotum; genitalia with coxite more than 1.5 times as long as wide and more than 0.25 the length of elytra.

Length 7.4 mm; width 2.7 mm.

Plesiallotype [GHNC] from Arizona, Pinal Mts., top of Sixshooter Canyon, elev. 2286 m, 30 August 1959, G. H. Nelson, on lavender composite.

Variation.—Of the 32 A. discalis examined, only 9 had any dark discal markings on elytra. They varied in size from 6.4 to 9.0 mm long and 2.3 to 3.3 mm wide.

Geographical distribution.—Central and southeastern Arizona. Type locality: Gila Co., Pinal Mts. Other localities in Arizona, from which material has been seen, include: Coconino Co., Oak Creek Canyon, 1–18 August, D. J. & J. N. Knull [FMNH]; Gila Co., Payson, September 1962 [GHNC]; Pima Co., Santa Catalina Mts., Molino Basin, 20 August 1953, G. M. Bradt [WFBC]; same place, 23 August 1952, G. M. Bradt [AMNH]; Santa Catalina Mts., Sabino Canyon, 6 September 1964, G. C. Walters; Pima Co., Rincon Mt., 16 September 1937, E. D. Ball [WFBC]; Cochise Co., Huachuca Mts., Miller's Canyon, 12 August 1961, GHN, on rock [GHNC]; Huachuca Mts., 24 July to 9 September, D. J. & J. N. Knull [FMNH]; Cochise Co., Palmerly [Palmerlee], June [AMNH]; Sixshooter Canyon, near Globe, 17 August 1958, R. L. Westcott [RLWE].

Biology.—The larval habits are unknown, and scant data on adults indicate they have been taken alighting on rocks and on lavender composites.

Comparison.—The superficial resemblance to A. riograndei is discussed under that species. On the basis of the female genitalia, A. discalis is most closely related to Acmaeodera cazieri Knull. The latter is similar in size and form but can be readily separated from A. discalis as follows: pronotum and ventral body black with bluish tint, and light color on elytra reduced to vittae.

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Footnotes

- ¹ Contribution No. 437, Bureau of Entomology, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, FL 32602.
- ² Research Associate, Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture and Consumer Services.

ZOOLOGICAL NOMENCLATURE

AN(S) 112

25th February, 1980

The Commission hereby gives six months notice of the possible use of its plenary powers in the following cases, published in *Bull. Zool. Nom.* Volume 36, part 4, on 18th February 1980, and would welcome comments and advice on them from interested zoologists. Correspondence should be addressed to the Secretary, if possible within six months of the date of publication of this notice.

- 1237 Carabus caerulescens Linnaeus, 1758, C. cupreus Linnaeus, 1758, and Cicindela rupestris Linnaeus, 1767 (Insecta, Coleoptera): designation of type specimens.
- 2219 Ceutorhynchus Germar, 1824 and Rhinoncus Schönherr, 1826 (Insecta, Coleoptera): proposed conservation and designation of type species.
- 2294 Bellota Peckham & Peckham, 1892 (Araneae): proposed designation of type species.

R. V. Melville, Secretary
% British Museum (Natural History), Cromwell Road,
London, SW7 5BD, United Kingdom